

Appendix D-6

RESPONSE TO COMMENTS

December 2011

On January 11, 2011, the Massachusetts Department of Environmental Protection (MassDEP) published its draft *Massachusetts Regional Haze State Implementation Plan (SIP)* for public comment. MassDEP held two public hearings, on February 10, 2011 in Springfield and on February 11, 2011 in Boston. No oral testimony was provided at either hearing. The public comment period closed on February 21, 2011. MassDEP received several sets of written comments. The substantive written comments received and MassDEP's responses are provided below.

Please note that MassDEP has submitted a partial final Regional Haze SIP to the U.S. Environmental Protection Agency (EPA) Region 1 office. MassDEP originally proposed to rely on EPA's draft Transport Rule as an Alternative to Best Available Retrofit Technology (BART) for Electric Generating Units (EGUs) and as part of its Targeted EGU Strategy. However, because Massachusetts is not included in EPA's final Transport Rule (i.e., the Cross-State Air Pollution Rule), MassDEP intends to re-propose those portions of its SIP that address BART requirements and the Targeted EGU Strategy in early 2012. Therefore, the responses to the comments below address the areas relevant to this partial final SIP only.

Commenters:

1. U.S. Department of Interior National Park Service and U.S. Fish and Wildlife Service, comments dated February 17, 2011 [NPS/FWS]
2. U.S. Department of Agriculture Forest Service, comments dated February 18, 2011 [FS]
3. U.S. EPA Region 1, comments dated February 15, 2011 [EPA]
4. Conservation Law Foundation, comments dated February 22, 2011 [CLF]
5. Massachusetts OilHeat Council, comments received February 18, 2011 [MOC]
6. Massachusetts Petroleum Council, comments received February 15, 2011 [MPC]
7. Wheelabrator, comments received February 21, 2011 [Wheelabrator]

Emissions Inventory and Effect on Visibility

1. Comment: On page 37, Massachusetts states "Version 3 of the 2002 base year emission inventory was used in the regional air quality modeling simulation" and that Massachusetts subsequently revised its inventory of area source heating oil emissions. Specifically, on page 45, footnote 2 indicates that SO₂ area source emissions were corrected from 54,924 tpy to 25,585 tpy. This is a significant revision. Were any of the contribution assessments for Massachusetts that are discussed in Section 7.2 recalculated to determine the impact of this correction? [EPA]

Response: MassDEP did not recalculate any of the contribution assessments for Massachusetts in Section 7.2. While the correction in 2002 baseline SO₂ emissions (from 164,163 tpy to 134,824 tpy) would lessen the magnitude of the effect Massachusetts emissions have on nearby Class I areas, the revised baseline emissions are still significant and MassDEP believes it is

likely these emissions would still meet the MANE-VU criteria for significantly affect the Class I areas in Vermont, New Hampshire, and Maine.

2. Comment: On page 44, it is unclear why carbon monoxide (CO) is included in the 2002 base year and 2018 projected emissions in Table 8. CO reductions should not be included in the calculation of projected reductions of total regional haze pollutants (currently estimated with CO to be 31 percent). The Table 8 calculation should be corrected and the page 117 reference to a 31 percent reduction should also be revised accordingly. [EPA]

Response: CO was included in the 2002 and 2018 base and projected emissions due to CO's inclusion in the MANE-VU emissions inventory. However, MassDEP has excluded the CO totals in Table 8 from the Regional Haze totals (and indicated this in footnote 9) and has revised the percent reduction in haze-forming pollutants for Massachusetts from 31 percent to 38 percent based on this change.

3. Comment: On page 48, the arrow in Figure 19 should be moved to align with Massachusetts instead of Illinois. [EPA]

Response: MassDEP has made this change.

General BART Comments

4. Comment: BART emission limits must be established as federally enforceable limits and then be reflected as applicable requirements in the sources' operating permits. It is stated on page 73 of the State Implementation Plan (SIP) that MassDEP intends to issue a federally enforceable permit cap to General Electric – Lynn. All of the draft permits or other enforceable commitments implemented as a result of BART should be included as an appendix to the BART section of the SIP and not be merely future commitments. This would include the emission caps for General Electric – Lynn and the permit limits (particularly particulate matter) for Wheelabrator. [NPS/FWS]

Massachusetts indicates that General Electric – Lynn has applied for a permit to limit NO_x and SO₂ emissions to less than 250 tons per year 9 TPY. In order for the Regional Haze SIP to be fully approvable, these caps must be made federally enforceable. [EPA]

Response: MassDEP has issued a final permit to General Electric - Lynn and has included it in this SIP for EPA approval (see Appendix BB). MassDEP intends to propose a permit for Wheelabrator by March 1, 2012 and finalize the permit for incorporation into this SIP by June 1, 2012.

Wheelabrator BART Determination

5. Comment: In Section 8.9 MassDEP makes a future commitment that Wheelabrator – Saugus will modify its NO_x control plan to comport with possible forthcoming revisions in Massachusetts regulations. Normally, future commitments are not acceptable in BART

determinations unless accompanied by an enforceable permit requirement, but since the NO_x emissions already meet Maximum Achievable Control Technology (MACT) requirements for Municipal Waste Combustors (MWC), such a future commitment is acceptable. [NPS/FWS]

Massachusetts' proposed BART determination for NO_x and PM for Wheelabrator-Saugus relies on regulatory revisions to 310 CMR 7.08(2) and 310 CMR 7.19 that are planned for 2011. In addition, page 76 references a NO_x permit modification that will be required no later than July 1, 2013. In order for the Regional Haze SIP to be fully approvable, enforceable emission limits which reflect the BART level of control must be imposed on this facility. MassDEP should include in its final SIP submittal a commitment to adopt and submit these requirements to EPA by a date certain in 2011. [EPA]

Response: MassDEP intends to propose a permit for Wheelabrator establishing the BART NO_x emissions rate by March 1, 2012 and finalize the permit for incorporation into this SIP by June 1, 2012.

6. Comment: Each of the Wheelabrator units meets a current PM emission limit of 27 mg/dscm, or less, at 7 percent oxygen (dry basis), but they do not necessarily meet the 2006 EPA Emissions Guideline for PM of 25 mg/dscm. MassDEP states that it intends to propose to adopt this lower PM emissions limit in revisions to 310 CMR 7.08(2) planned for 2011 and that Wheelabrator – Saugus will be required to comply with the lower PM emissions rate. All enforceable commitments that are intended to meet BART should be contained in the Massachusetts Regional Haze SIP or in an appendix to the SIP. Therefore, the SIP should contain a PM emission limit of 25 mg/dscm for the two Wheelabrator units with an effective date not later than five years after EPA approval of the SIP. This inclusion in the SIP would not change the effect on Wheelabrator of the proposed State regulatory action. [NPS/FWS]

Response: MassDEP intends to propose a permit for Wheelabrator establishing the BART PM emissions rate by March 1, 2012 and finalize the permit for incorporation into this SIP by June 1, 2012.

7. Comment: MassDEP makes an argument that a de minimis visibility impact on Class I areas of less than 0.1 deciview is reason to not require further PM controls. Actually, the determination as to whether PM controls are necessary under BART is made by ascertaining the cost of implementing various controls, rather than making a subjective judgment of visibility impact. Once a source is found to be subject-to-BART, controls on PM emissions from an emission unit may be found to be so insignificant that the cost of control is excessive and addition of PM emission controls is not required under BART. EPA's BART Guidelines say that states should consider ways to improve the performance of existing control devices. Since fabric filters and electrostatic precipitators (ESPs) are capable of 99.5% PM control efficiency and a controlled particulate matter emission rate of 0.015 lb/MMBtu, the emission limits proposed in the last column of Table 20 could be made more stringent. Please either explain why the permitted levels of PM controlled by fabric filters and ESPs cannot meet more stringent emission limitations, or reduce the permitted level of control in accordance with the capabilities. [NPS/FWS]

Response: MassDEP intends to re-propose those portions of its SIP that address BART requirements for EGUs in early 2012 and will consider this comment in that re-proposal.

8. Comment: EPA's provisions in the Regional Haze rule were designed specifically to reduce visibility impairing emissions from major stationary sources that, because of their age (built prior to 1977) were exempted from the New Source Performance Standards (NSPS). The Wheelabrator Saugus MWC facility is considered a BART eligible major stationary source only since it was built in 1975 - not because it lacks extensive air pollution controls. The facility already has substantial air pollution controls that go well beyond any BART requirement including spray dryer absorbers (SDAs) or dry scrubbers, large reverse air fabric filters, activated carbon injection systems and Selective Non-Catalytic Reduction (SNCR) NO_x controls. The SDA and fabric filters were installed in 1991 while carbon injection and SNCR were installed in 1999. The existing air pollution controls meet the Maximum Achievable Control Technology (MACT) requirements under Sections 129/111d of the 1990 CAA amendments. It has always been our contention that the extensive air pollution controls at the Wheelabrator Saugus facility already meet or exceed BART requirements and consequently source specific BART analysis could have stipulated to this fact. Stipulating that all existing controls are BART could be justified since total visibility impacts for SO₂, NO_x and PM₁₀ were only 0.232 and 0.179 ddv (depending on modeling platform, NWS and MM5) well below EPA's threshold guidance of 0.5 ddv for determining whether a source contributes to visibility impairment. We point out that Wheelabrator Saugus is treated under BART in the same manner as the EGUs and other fossil fuel fired units built prior to 1977 that did not have the extensive air pollution controls since 1991 like Saugus. Further no consideration is given to the fact that Saugus installed SDAs and fabric filters well before they were required by MACT and well before the final Regional Haze BART regulations were adopted by EPA in 1999. [Wheelabrator]

Response: MassDEP recognizes that Wheelabrator already has installed extensive pollution controls. In its proposed BART determination for Wheelabrator, MassDEP did not propose any additional controls for Wheelabrator but proposed a NO_x emissions rate of 185 ppm (down from 205 ppm) based on Wheelabrator's own optimization test results (Appendix Z of the draft SIP) and a proposed PM emission rate of 25 mg/dscm based on the existing federal Maximum Achievable Control Technology (MACT) that Wheelabrator already is subject to, but its permit currently has a limit of 27 mg/dscm. MassDEP did not propose any change in emission rate for SO₂. In the final SIP, MassDEP has maintained its BART determinations for these pollutants and will work with Wheelabrator to ensure that appropriate permit conditions are included in its permit by June 1, 2012.

9. Comment: For SO₂ emissions at Wheelabrator, visibility modeling results under both modeling platforms indicated visibility impacts for SO₂ emissions were de minimis (0.1 ddv) thus there is no need to conduct any further BART analysis for SO₂ emissions. Subsequently, it should be stated that "further SO₂ controls are not warranted because visibility impacts are already de minimis (0.1 ddv) not on the basis of "the additional costs to install supplementary controls" which implies additional controls were even contemplated. For comparative purposes it should be noted the current Saugus SO₂ limit of 29 ppm 7% O₂ is equivalent to 0.069 lbs/MMBtu which is less than 1/2 the presumptive coal fired EGU SO₂ BART limit of 0.15 lbs/MMBtu and almost 1/5 the oil fired EGU SO₂ BART limit of 0.33 lbs/MMBtu. It seems that

Saugus is being held to a much higher BART standard even when significant SO₂ reductions have been achieved since 1991. There should be some consideration of this here. [Wheelabrator]

Response: MassDEP recognizes and stated in the draft SIP that the visibility impacts for SO₂ emissions from Wheelabrator are de minimis. However, since any BART review should consider the five factors that make up a BART review, including costs, MassDEP has included a statement that further SO₂ controls are not warranted given the additional cost required and the degree of visibility improvement that could be achieved is de minimis.

10. Comment: For Wheelabrator PM emissions, MassDEP only has to state that visibility modeling results under both modeling platforms indicated there were no visibility impacts (0 ddv) from facility PM emissions and thus no requirement to conduct a BART analysis. Since there is no visibility impact from emissions at current limit of 27 mg/dscm there is no need to state that future MACT PM limit of 25 mg/dscm represents BART - BART is not required. Therefore there is no need to even mention any consideration of additional costs for supplemental PM controls since supplemental controls should not even have been considered. [Wheelabrator]

Response: Since Wheelabrator is subject to the current MACT for PM of 25 mg/dscm, even though this limit is not yet reflected in Wheelabrator's current permit, MassDEP has determined that this rate represents BART (versus the currently permit rate of 27 mg/dscm) because it is an existing limit that Wheelabrator is subject to. Since a BART review should consider the five factors that make up a BART review, including costs, MassDEP included a statement that further PM controls are not warranted given the additional cost required and the degree of visibility improvement that could be achieved is de minimis.

11. Comment: As reasoned above Wheelabrator believes that the current NO_x limit of 205 ppm 7% O₂ should represent BART for the facility for two reasons: 1) current visibility impacts from the facility are well below EPA's visibility threshold guidance of 0.5 ddv for whether a source contributes to visibility impairment and 2) current SNCR NO_x controls represent MACT. While the optimization test indicated 185 ppm limit could be achievable it was a short term test and may not necessarily represent long term continuous operation under all conditions. The long term uncertainty of complying with the proposed limit is further complicated as MassDEP's source reduction and recycling initiatives could impact MSW content. If the 185 ppm limit must be retained as BART, we urge MassDEP to consider a longer averaging time such as a 30 day rolling average or a facility average limit of 185 ppm. This would result in same level of annual NO_x emission reductions but allow for some short term variability and reduce uncertainty of continuously achieving a proposed limit based on a short term optimization test. Finally, MassDEP references the forthcoming presumptive RACT limits for MWCs. DEP should be aware that Saugus' facility low profile boiler design physically limits SNCR system optimization flexibility with respect to reagent distribution and residence time in furnace at optimum temperature without excess ammonia slip. Subsequently the prospects of a lower limit is very unlikely. The difference in MWC combustor design on NO_x emissions control was recognized by EPA in development of the MACT emissions limits for NO_x. (See Table 2 in 40 CFR 60 subpart Cb Emission Guidelines). [Wheelabrator]

Response: MassDEP has based its NO_x BART determination on Wheelabrator's optimization testing showing what is achievable at the facility. MassDEP agrees that a 30-day rolling averaging is appropriate for the BART determination to provide flexibility in meeting the 185 ppm emissions rate. Regarding MassDEP's planned draft Municipal Waste Combustor regulation revisions, MassDEP recognizes that further SNCR system optimization flexibility may be limited, and that a demonstration could show that the 185 ppm emissions rate also meets Reasonably Available Control Technology (RACT) for the facility.

Alternative to BART

12. Comment: MassDEP proposed an alternative to BART that relied on EPA's proposed Transport Rule. However, the SIP should contain an affirmative statement by MassDEP that if the proposed Transport Rule should not become final or contain an effective date within the required BART implementation timeframe, that MassDEP will commit to enact a State rule to implement emission limitations similar to those which are envisioned in the proposed Transport Rule so as to be compliant with BART. [NPS/FWS]

Massachusetts "Alternative to BART" approach relies on the emission reductions outlined in EPA's proposed Transport Rule. Although Massachusetts' analysis demonstrates that this alternative will achieve greater emission reductions than source-by-source BART, EPA will not be able to fully approve Massachusetts Regional Haze SIP until the final Transport Rule has been promulgated. [EPA]

MassDEP should update its proposed "Alternative to BART" demonstration to incorporate new information in EPA's 1/7/11 Notice of Data Availability (NODA) for the proposed Transport Rule, which proposes revised SO₂ and NO_x emission allocations for unit subject to the Transport Rule. [EPA]

In order to enhance the discussion on page 82, EPA recommends that MassDEP include a graphic demonstrating the similar geographic distribution of the sources subject to BART and the sources included in the "Alternative to BART" demonstration. [EPA]

Massachusetts is home to 17 major sources that contribute to regional haze in New England primarily through emissions of sulfur dioxide, nitrogen oxides, particulate matter, volatile organic compounds and ammonia. Rather than using the regional haze SIP to require significant emissions reductions from these sources, MassDEP has chosen to rely on the reductions that are expected to result from EPA's proposed Transport Rule. CLF urges MassDEP to reconsider this proposal and implement additional requirements for facilities that are covered under the Regional Haze Rule. (CLF incorporates into this letter the comments submitted by the EPA on the earlier drafts of this rule. CLF also attaches Exhibit 1, a letter from the National Parks Conservation Association to Gina McCarthy, Assistant Administrator for the Office of Air and Radiation at EPA, and incorporates those comments.) CLF's primary objection to the proposed rule is the decision to rely upon the proposed Transport Rule as an alternative to implementing source-by-source Best Available Retrofit Technology ("BART") for each of the eligible facilities. As the Department notes, the Transport Rule has not yet been finalized, and there is no guarantee that the reductions proposed in the draft rule will be carried into the final rule. As a result, there is no

guarantee that Massachusetts will be able to meet the statutory requirement that it “demonstrat[e] that the emissions trading program or other alternative measure will achieve greater reasonable progress than would have resulted from the installation and operation of BART at all sources subject to BART in the State.” Massachusetts should be required to provide a justification for how its proposal meets each of the obligations set forth at 40 CFR 51.308(e)(2). Further, Massachusetts does not consider whether and to what extent any changes in the final allocations under the Transport Rule would affect regional haze, and in the event that it provides the information necessary to implement this alternative, Massachusetts should provide an analysis of alternative allocations that were submitted during the comment period for the Transport Rule. Finally, Massachusetts based its modeling for the impacts of the Transport Rule on models of the impacts of the now vacated Clean Air Interstate Rule. If Massachusetts plans to rely on the Transport Rule, the modeling to justify that decision should be based upon the Transport Rule. [CLF]

Response: MassDEP’s proposed Alternative to BART would have resulted in significant reductions in SO₂ and NO_x and complied with the Regional Haze Rule if EPA’s final Transport Rule had included Massachusetts (based on allocations in EPA’s Transport Rule NODA). However, since Massachusetts is not included in EPA’s final Transport Rule (i.e., the Cross-State Air Pollution Rule), MassDEP intends to re-propose those portions of its SIP that address BART requirements for EGUs in early 2012.

13. Comment: A letter from EPA Region 1 to the Department recommended that Massachusetts consider the use of natural gas as the primary fuel for Mystic Station Unit 7 and Brayton Point Unit 4, and suggested that this measure be considered for any other units that were capable of burning oil or natural gas. To the extent that oil-fired electric generating units continue to burn oil, EPA recommended that Massachusetts require the use of 0.5% sulfur by weight residual oil as soon as possible. Although Massachusetts includes switching to natural gas as one of the alternative control measures considered in Table 24, there is no description of the analysis. CLF requests that the Department provide the accompanying analysis and explain why this measure was not ultimately recommended. [CLF]

Response: The referenced EPA Region 1 letter was regarding MassDEP’s July 2009 revised chapter on BART that was provided to the Federal Land Managers and EPA as required by the Regional Haze Rule. In that Chapter, MassDEP had proposed source-specific BART determinations, upon which EPA commented. After EPA proposed the Transport Rule in August 2010, due to the significant reductions in SO₂ and NO_x that were proposed for the BART sources (as well as other sources), MassDEP adopted a different approach to meeting the Regional Haze Rule by proposing an Alternative to BART proposal that relied on the Transport Rule. Under an alternative to BART approach, a BART source by source analysis is not required. Instead, emissions reductions from the alternative to BART are compared to a BART benchmark that reflects the most stringent emissions that would be required under BART. Since MassDEP proposed an Alternative to BART, MassDEP did not conduct source by source BART analyses, but calculated a stringent BART benchmark (based on MANE-VU’s recommended BART emission rates) to which the Alternative to BART was then compared. This comparison showed that the Alternative to BART achieved greater emissions reductions than would be achieved through source by source BART determinations. However, since Massachusetts is not

included in EPA's final Transport Rule (i.e., the Cross-State Air Pollution Rule), MassDEP intends to re-propose those portions of its SIP that address BART requirements for EGUs in early 2012.

Targeted EGU Strategy

14. Comment: EPA's January 7, 2011 NODA includes revised SO₂ allocations for units subject to the Transport Rule. Therefore, MassDEP should update Table 25 on page 110 to incorporate these revised SO₂ allocations. It appears that 90 percent SO₂ reduction for the "Targeted EGU Strategy" will still be met with the revised allocations. [EPA]

Response: Since Massachusetts is not included in EPA's final Transport Rule (i.e., the Cross-State Air Pollution Rule), MassDEP intends to re-propose those portions of its SIP that address the Targeted EGU Strategy in early 2012.

15. Comment: In Section 2.11, Massachusetts asks states outside of the New England region for: 90% reduction of SO₂ from the top 100 EGUs; Application of reasonable controls on Non-EGUs; Evaluation of other measures from all coal-burning facilities by 2018 and promulgation of NSPS for wood combustion. However, Massachusetts' proposed rule does not meet these objectives. For example, at Table 25, "Targeted EGU Reductions in Massachusetts", the Department shows that under the Transport Rule, Brayton Point, Mt. Tom, and Salem Harbor Station are expected to fall short of the 90% SO₂ reductions that it is asking other states to meet. Massachusetts should take actions consistent with the recommendations it has made for states outside of the MANE-VU region.

Response: The MANE-VU states, including Massachusetts, agreed to statements issued in June 2007 outlining strategies for states within MANE-VU and states outside of MANE-VU to implement to address regional haze. For the 90% reduction in SO₂ emissions from the top emitting EGUs, the statements include flexibility so that if a state is unable to achieve the 90% reduction, alternative measures can be pursued. In Table 25 in the draft SIP, the reductions that were anticipated from the Transport Rule met the 90% reduction commitment for the Targeted EGUs as a whole, even though certain units may not have met the 90% reduction. Thus MassDEP's original proposal met the objective of the Target EGU Strategy. However, since Massachusetts is not included in EPA's final Transport Rule (i.e., the Cross-State Air Pollution Rule), MassDEP intends to re-propose those portions of its SIP that address the Targeted EGU Strategy in early 2012.

Low Sulfur Oil Strategy

16. Comment: Massachusetts proposed Regional Haze SIP includes a demonstration that the MANE-VU low sulfur fuel oil strategy is reasonable. Massachusetts, however, has not yet adopted a regulation imposing these requirements. On page 117 of the proposed SIP, Massachusetts states, "MassDEP intends to promulgate regulatory revisions to 310 CRM 7.05 in 2011 to implement the low sulfur fuel strategy in accordance with the MANE-VU Statement." MassDEP should include in its final SIP submittal a commitment to adopt and submit a final rule to EPA by a date certain in 2011. [EPA]

Response: MassDEP intends to propose a low sulfur oil regulatory revisions by March 1, 2012 and finalize regulatory revisions for incorporation into the SIP by June 1, 2012.

17. Comment: The Massachusetts Oilheat Council (MOC) supports MassDEP's proposed regulations to reduce the sulfur content in home heating oil (#2 distillate) and residual oils (#4 and #6 oils) in accordance with MANE-VU. In September 2009, Oilheat representatives from across the county convened in Baltimore, Maryland and unanimously agreed to pursue enacting state laws and/or regulations that would lower the sulfur content of home heating oil as quickly as possible, and to begin blending this fuel with biofuel at levels up to 5%. A study conducted by the National Oilheat Alliance (NORA) in 2010 supports the Oilheat industry's resolution and the benefits of a shift to ultra low sulfur heating oil. The NORA study is included ("Ultra-Low Sulfur Diesel Fuel/Heating Oil Market Study" prepared by Kevin J. Lindemer LLC for the National Oilheat Research Alliance). MOC supports MassDEP's efforts "to pursue the implementation of the low sulfur fuel strategy with 500 ppm percent sulfur by weight for distillate oil and 1.0% sulfur by weight for residual oils by 2014, with further respective reductions to 15 ppm and 0.5% by 2018," and DEP's plans to amend 310 CMR and incorporate these limits. [MOC]

Response: MassDEP appreciates MOC's support for low sulfur regulations and has cited the Lindemer/NORA study in its SIP since it shows that moving to 15 ppm home heating oil by 2018 is feasible and is likely to result in a net savings for consumers.

18. Comment: The Massachusetts Petroleum Council (MPC) has a suggestion to improve the specific language of the proposed low sulfur oil regulation in its formal SIP promulgation. MassDEP's Regional haze SIP uses broad language for the effective date for the two phases of sulfur reduction, by 2014 and by 2018. MPC urges MassDEP to coordinate the effective dates with the similar regulation recently adopted in New Jersey (NJAC 7:27-9), which has effective dates of July 1, 2014 and July 1, 2018 for the two phase-in dates. These specific dates were chosen to avoid a potential disruption in the supply chain by imposing a stricter sulfur specification during the middle of the winter heating season. [MPC]

Response: MassDEP agrees with this comment and intends to propose specific phase-in dates of July 1, 2014 and July 1, 2018 in its low sulfur oil regulation. MassDEP expects that regulation to be proposed by March 1, 2012.

Particulate Matter, Ammonia and VOCs

18. Comment: Although the Department explains that particulate matter, ammonia and volatile organic compounds also contribute to haze and are not covered by the proposed Transport Rule, it fails to take any actions to reduce these emissions. Massachusetts should conduct further analysis related to the types of pollution control technologies that are available to reduce these pollutants, provide for additional monitoring of these pollutants, and propose reductions from the facilities that emit these pollutants in more than de minimis amounts. Ammonia is the only pollutant contributing to haze that has risen over the past few years, and the Department needs to conduct further study to determine the cause of this increase. [CLF]

Response: For the first regional haze planning period through 2018, the MANE-VU states identified sulfates as the primary contributor to regional haze and therefore focused emission reductions strategies on reducing SO₂, which is the primary precursor to particulate sulfates. In addition, there is greater uncertainty regarding the emissions inventories for other haze forming pollutants and regarding the visibility impacts they create. MassDEP anticipates that in future regional haze SIPs, more attention will be focused on these other pollutants as states and EPA develop better information and effective control strategies.